<u>Tab I.</u> "Electronic sourcing system"

Claims using this term: claims 3 and 6 of the '683 patent; claims 1, 2, 6, 9, 21, 22, and 29 of the '516; and claim 1 of the '172 patent

Lawson remaining terms and phrases 5

Lawson's Proposed	Lawson's Proposed Definition
Definition	
No Construction	"After all of the items for a requisition have been entered, the next
required.	step is that of sourcing the requisition. Sourcing the requisition is
	the process of determining what inventory will be used to fill the
If the court chooses	requisition. Pricing is also performed in this step when it is called
to construe the	for (e.g. for all product types except for 05 and 06)." ('989 patent
preamble, "a system	(incorporated by reference in the patents in suit), Detailed
for determining what inventory will	Description of the Invention, 11:26-31)
be used to fulfill	"One such system is the Fisher Scientific Requisition and
requests for items"	Inventory Management System ('Fisher RIMS'), described U.S.
	Pat. No. 5,712,989, filed Apr. 2, 1993 and assigned to Fisher
	Scientific Company of Pittsburgh, Pa., the disclosure of which is
	incorporated herein by reference." ('683 patent, Background of the
	Invention, 1:13-17)

Tab I: "Electronic sourcing system"

5,712,989

11

product type 04: vendor stock number and the vendor number (which corresponds to a particular vendor). These data are forwarded to the host computer 10 to be checked against or added to host database 20 (for products of price type 04, but not for products of price type 05). An error will 5 result in "sourcing" this order if this information is not provided by the CSR or does not correspond to information in host database 20 for a non-catalog item.

For items of product type 05, the CSR will create an order record or document ordering the item on behalf of the 10 customer or confirming an order placed on behalf of the customer (e.g., by telephone to the designated vendor).

For items of product type 05, the CSR may order the item for the Customer. These orders are not placed or filled using the system of the present invention, although data regarding these transactions may be entered on Non-Catalog Information data screen 80 to record these transactions. Instead, either the proposed purchase order record is uploaded into the customer's computer for processing or a document is printed at local printer 43 for signature and action by the customer's purchasing agent or the CSR confirms that the order has been placed with the designated vendor by some other means.

Sourcing

After all of the items for a requisition have been entered. the next step is that of sourcing the requisition. Sourcing the requisition is the process of determining what inventory will be used to fill the requisition. Pricing is also performed in this step when it is called for (e.g., for all product types except for 05 and 06).

Sourcing, which is represented by step 88 in FIG. 2, is initiated by hitting the F6 key from the Requisition Management data screen 68 (or from Order Header data screen 35 60 or Non-Catalog Information data screen 80.)

Sourcing is performed on both local computer 40 and host computer 10. Sourcing in the preferred embodiment of the system of the present invention can involve up to four different product types: 01—local Distributor-owned JIT 40 items; 03-Distributor catalog items; 04-third-party items which are ordered by the Distributor; Type 06-Customerowned JIT items. (Product type 05 comprises third-party items which are not sourced by the system of the present invention.) Any particular requisition may involve all of 45 these product types, only a single product type, or any combination of product types.

The product type which was determined when the STOCK NBR was entered on the Requisition Management data screen is now used to source the item. Items of product 50 type 06 are sourced from the Customer-owned Inventory 54; items of product type 01 are sourced from Distributorowned inventory 52.

Sourcing for each item in the Requisition Item Table will be described in connection with FIGS. 4A through 4D. In 55 creates a warning message indicating a proposed backorder step 220, the CSR hits the F6 (Source) key from Requisition Management data screen 68. In steps 221 and 224, the system checks the product type (in the PT field) of the item and routes control of the program according to that product type. If the item is of product type 03 or 04, control passes 60 through point A 222 to the diagram shown in FIG. 4C. If the item is of product type 01 or 06, control passes to block 228. If the item is of product type 05, control passes to point B 226. The processing of transactions of product type 05 by the preferred embodiment of the system of the present invention 65 is of a record keeping nature. In the steps represented by point B 226, the CSR enters the relevant data regarding the

transaction and the data are stored in local database 50 in the same manner as data relating to the other product types described herein. The data may then be uploaded periodi-

12

cally to the Customer's host computer. In the case where the item has product type 01 (an item owned by Distributor in JIT facility 51), local computer 40 will prepare and send to host computer 10 a block of data including the stock number (STOCK NBR), product type (PT), warehouse location code (LOC), the requisitioned quantity (QTY), the quantity available at the JIT facility 51 and header data, as shown in step 230. The header data includes at least the account number and requisition number. Local computer 40 then waits for host computer 10 to transmit a block of data in response to the transmission of local computer 40, as shown in step 232. Local computer

sends the block of data via the communication linkage

described in connection with FIG. 1.

At host computer 10, the data sent by local computer 40 is received as shown in step 250 of FIG. 4B. Most computer 10 first uses the warehouse location code (LOC) and the stock number (STOCK NBR) to access host database 20 to determine what the host's records show for the quantity available at the relevant location for the item being requisitioned, as shown in step 252. The host's quantity 25 available is compared to the received quantity available QTY AVAIL) to determine if they match, as shown in step 256. If the quantities are not the same, host computer 10 creates a data block including an inventory match error code, as shown in step 258. This data block will then be transmitted back to local computer 40 via the communication link, as shown in step 272. This insures that the host and local databases are in agreement as to the quantity of an item in JIT facility 51 which is owned by the Distributor.

If, however, the host computer's 10 quantity available does match that in the received QTY AVAIL field, in step 256, host computer 10 then determines if the quantity available (QTY AVAIL) is equal to or exceeds the requisitioned quantity (QTY), as shown in step 260. If the quantity available is equal to or exceeds the quantity requisitioned, host computer 10 then prices the item, as shown in step 268 (using the program represented by block 96 of FIG. 2B). Any conventional algorithm or data structure may be employed by host computer 10 for determining the net price per unit of a particular Distributor product sold to a particular Customer as shown in step 268. Such pricing may be based, for example, on Distributor's list price and a percentage discount off that list price negotiated between Distributor and Customer and recorded in host database 20 for that product type. As is described below, the net price per unit is sent from host database 20 through the communications link to the local computer 40 for entry into a previously blank field in the Requisition Item Table.

If the quantity available is determined to be less than the quantity requisitioned in step 260, host computer 10 then for a quantity equal to the difference between the quantity requisitioned (QTY) and the quantity available (QTY AVAIL). As will be discussed below, the CSR need not accept this backorder. Host computer then proceeds with pricing step 268.

After pricing is complete, host computer 10 creates a data block including the information regarding any backordered quantities of the item and the net price per unit of the item, as shown in step 270. This data block is then transmitted to local computer 40, as shown in step 272.

In block 234 of FIG. 4A, local computer 40 receives the data block transmitted from host computer 10. Local com-

Tab I: "Electronic sourcing system"

6,023,683

1

ELECTRONIC SOURCING SYSTEM AND METHOD

BACKGROUND OF THE INVENTION

This invention relates to systems and methods for interfacing product information, such as is typically found in vendor catalogs that are provided to customers, and requisition/purchasing systems and methods that may use the results of searches of product information.

There are a number of known requisition/purchasing systems that manage and process requisitions and purchase orders. One such system is the Fisher Scientific Requisition and Inventory Management System ("Fisher RIMS"), described U.S. Pat. No. 5,712,989, filed Apr. 2, 1993 and assigned to Fisher Scientific Company of Pittsburgh, Pa., the disclosure of which is incorporated herein by reference. As its title suggests, Fisher RIMS can also manage inventory. In the Fisher RIMS system, requisition records are created from a real-time interaction between a host computer 20 (generally a mainframe) and a local computer (generally at a customer site), with each computer using data from its own respective database of inventory in conjunction with information entered by a customer service representative operating the local computer. By accessing its respective 25 database, each computer can build and transmit to the other computer communications blocks of data relating to a particular requisition of an item in inventory (or to the management of the inventory itself). The other computer can then use the received data to continue processing of the 30 requisition. Thus, requisition records are created from a real-time interaction between the host and local computers, with each computer using data from its respective database in conjunction with information entered by a customer service representative operating the local computer.

Other requisition/purchasing systems can be grouped broadly into four classes. First, requisition management systems licensed to corporations purchasing for their own use include ORION software (from Medical Management Systems), ENTERPRISE software (from ESI), and NOVA 40 software (from Johnson & Johnson). Second, there exist systems provided by distributors for transmitting orders to them in proprietary formats. Such systems include QUICK-LINK (from Abbott), ASAP system (from Baxter) and LIGHTNING system (from Fisher Scientific). Third, soft- 45 ware packages licensed by software developers to customers and/or suppliers enable the transmission of customer purchase orders as EDI purchase orders (in ANSI X.12 format). Examples of such systems include ON-CALL EDI (from TSI International), EDI Express software (from General 50 Electric Information Services) and GETRAN software (from Sterling Software). Fourth, comprehensive business management packages such as REAL WORLD software (from Real World Corporation of Concord, NH) and ASK software (from The ASK Group) contain a purchasing 55 module to create replenishment orders when inventoried items fall below restocking points. The same purchasing module can also be used to place spot orders for products keyed in by the customer's purchasing personnel.

None of these known requisition/purchasing systems 60 (including Fisher RIMS), however, provides a capability for a user readily to search for and locate information about the products that may be requisitioned and ordered in connection with the requisition/purchasing system. They also do not provide the capability for a user to search a database 65 containing two or more vendor catalogs, and then to transfer information about the items selected as a result of such

2

searches into a requisition/purchasing system such as Fisher RIMS for building a requisition for the catalog items.

Computer systems that are capable of searching databases containing a product catalog of a particular vendor, for example on CD-ROM, are also known. Such systems can search for user requested information about products and create orders which the user can save, print or, in some cases, facsimile directly to a vendor. The known computer systems for searching vendor catalogs are limited in that only one such vendor catalog is accessible to a user at any given time. They are also limited in that they can only create an order within the particular vendor catalog database. They cannot source items to be requisitioned from a database containing multiple catalogs or interact with a requisition/purchasing system (such as Fisher RIMS) to create a purchase order or orders including the items located from that sourcing operation.

Thus, it would be desirable to provide an electronic sourcing system that provides a means for transferring information between a requisition/purchasing system that may use the results of a search of product information and a means for searching large volumes of product information such as would be included in a vendor product catalog or catalogs.

It would also be desirable to provide such an electronic sourcing system that is capable of searching a database containing at least two vendor product catalogs for product information.

It would further be desirable to provide such an electronic sourcing system that is capable of searching a database of catalog items contain in at least two vendor product catalogs, selecting particular items located, and transferring information about the items selected (for example, a catalog number and a vendor identifier, such as vendor name and/or vendor number) to a requisition/purchasing system for inclusion in a requisition generated by the system.

It would further be desirable to provide an electronic sourcing system that is capable of creating an order list including items located as the result of a catalog database search and transferring that order list of desired catalog items to a requisition/purchasing system for inclusion of the catalog items as entries in a requisition generated by the system.

SUMMARY OF THE INVENTION

In view of the foregoing, it is an object of this invention to provide an electronic sourcing method and system that provides a user with the capability of searching a database containing data (including product/vendor identification, and other product information) relating to items available from at least two vendor product catalogs, and the capability of transferring the product information for desired catalog items obtained as a result of the search to a requisition/purchasing system for use in generating a requisition including entries for the desired catalog items.

It is also an object of this invention to provide an electronic sourcing system that provides a means for bi-directionally transferring information between a requisition/purchasing system that may use the results of a search of such product information, and a means for searching large volumes of product information such as would be included in a vendor product catalog.

It is a further object of this invention to provide an electronic sourcing system capable of creating an order list including desired catalog items located as the result of such a database search, and transferring that order list to a